

## CLAIMS

Therefore, at least the following is claimed:

- 1        1.        A method of managing deployed trunk circuit capacity, the method comprising  
2                the steps of:  
3                        monitoring trunk circuits to collect traffic usage data;  
4                        analyzing the traffic usage data by computing time-moving averages;  
5                        and  
6                        forecasting trunk circuit capacity requirements based at least in part on  
7                        the time-moving averages.
- 1        2.        The method of claim 1, wherein the time-moving averages are based on a  
2                cluster that is a community of interest with a locality of communication access  
3                pattern.
- 1        3.        The method of claim 2, wherein the cluster comprises at least one switch and  
2                trunk circuits to at least two other switches.
- 1        4.        The method of claim 1, wherein the traffic usage data comprises a metric that  
2                is based upon multiples of a base unit of bandwidth.
- 1        5.        The method of claim 1, wherein the traffic usage data comprises a metric that  
2                is based upon a count of a plurality of connections multiplied by a duration of  
3                each of the connections.
- 1        6.        The method of claim 1, wherein the time moving averages are computed at  
2                least weekly.
- 1        7.        The method of claim 1, wherein the forecasting step computes a plurality of  
2                forecasts using a plurality of models.
- 1        8.        The method of claim 1, wherein the forecasting step allows manual override of  
2                at least one model parameter.

- 1        9.        The method of claim 8, wherein the forecasting step uses a graphical user  
2                    interface (GUI) for entering the manual override of the at least one model  
3                    parameter.
- 1        10.       The method of claim 1, wherein the forecasting step displays forecast output  
2                    through a graphical user interface (GUI).
- 1        11.       A system that facilitates managing deployed trunk circuit capacity, the system  
2                    comprising:  
3                    logic configured to monitor trunk circuits to collect traffic usage data;  
4                    logic configured to analyze the traffic usage data by computing time-  
5                    moving averages; and  
6                    logic configured to forecast trunk circuit capacity requirements based  
7                    at least in part on the time-moving averages.
- 1        12.       The system of claim 11, wherein the time-moving averages are based on a  
2                    cluster that is a community of interest with a locality of communication access  
3                    pattern.
- 1        13.       The system of claim 12, wherein the cluster comprises at least one switch and  
2                    trunk circuits to at least two other switches.
- 1        14.       The system of claim 11, wherein the traffic usage data comprises a metric that  
2                    is based upon multiples of a base unit of bandwidth.
- 1        15.       The system of claim 11, wherein the traffic usage data comprises a metric that  
2                    is based upon a count of a plurality of connections multiplied by a duration of  
3                    each of the connections.
- 1        16.       The system of claim 11, wherein the time moving averages are computed at  
2                    least weekly.

1        17.     The system of claim 11, wherein the logic configured to forecast computes a  
2                plurality of forecasts using a plurality of models.

1        18.     The system of claim 11, wherein the logic configured to forecast allows  
2                manual override of at least one model parameter.

1        19.     The system of claim 18, wherein the logic configured to forecast uses a  
2                graphical user interface (GUI) for entering the manual override of the at least  
3                one model parameter.

1        20.     The system of claim 11, wherein the logic configured to forecast displays  
2                forecast output through a graphical user interface (GUI).